

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 823.0103WOU	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US01/26864	International filing date (<i>day/month/year</i>) 29 August 2001 (29.08.2001)	(Earliest) Priority Date (<i>day/month/year</i>) 30 August 2000 (30.08.2000)
Applicant THE PENN STATE RESEARCH FOUNDATION		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the Report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (See Box II).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 3



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/26864

Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

An electro active device (320) for generating a directional beam includes first (300) and second (305) electro active substrates each having first (355, 360) and second (345, 350) opposed continuous planar surfaces. The first opposed surfaces (355, 360) of the first (300) and second (305) electro active substrates are in close contact. A first electrode (310) is coupled to a junction formed by the first opposed surfaces (355, 360), a second electrode is coupled to the second opposed surface (345) of the first electro active substrate (300), and a third electrode is coupled to the second opposed surface (350) of the second electro active substrate (305). A first endcap (325) is joined to the second opposed surface (345) of the first electro active substrate (300) and a second endcap (330) is joined to the second opposed surface (350) of the second opposed surface of the second electro active substrate (305).

PATENT COOPERATION TREATY

RECEIVED

MAR 07 2002

From the INTERNATIONAL SEARCHING AUTHORITY

To:
PAUL D. GREELEY
OHLANDT, GREELEY, RUGGIERO & PERLE, L.L.P.
ONE LANDMARK SQUARE, 10TH FLOOR
STAMFORD CT 06901-2682

PCT

OHLANDT, GREELEY,
RUGGIERO & PERLENOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

	Date of Mailing (day/month/year) 01 MAR 2002
Applicant's or agent's file reference 823.0103WOU	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/US01/26864	International filing date (day/month/year) 29 August 2001 (29.08.2001)
Applicant THE PENN STATE RESEARCH FOUNDATION	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.
Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the international search report; however, for more details, see the notes on the accompany sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.
3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
- ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
- ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau.
If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90 bis 1 and 90 bis 3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer PETER MEDLEY Telephone No. (703) 308-0956 <i>Bence Preston</i>
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Form PCT/ISA/220 (July 1998)

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
PAUL D. GREELEY
OHLANDT, GREELEY, RUGGIERO & PERLE, L.L.P.
ONE LANDMARK SQUARE, 10TH FLOOR
STAMFORD CT 06901-2682

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Form PCT/ISA/220 (July 1998)